

REMARKS / ARGUMENTS

Introduction

The present Amendment is in response to the Examiner's non-final Office Action mailed August 25, 2004. Claims 1-26 remain pending.

Please note that the following remarks are not intended to be an exhaustive enumeration of the distinctions between any cited references and the claimed invention. Rather, the distinctions identified and discussed below are presented solely by way of example to illustrate some of the differences between the claimed invention and the cited references. In addition, Applicants request that the Examiner carefully review any references discussed below to ensure that Applicants' understanding and discussion of the references, if any, is consistent with the Examiner's understanding. Reconsideration of the application is respectfully requested in view of the following remarks. For the Examiner's convenience and reference, Applicant's remarks are presented in the order in which the corresponding issues were raised in the Office Action.

Claim Rejections under 35 U.S.C. § 103

The Office Action rejected claims 1-4, 6-12, 14-18, and 20-22 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,236,478 (*Stoll*) in view of U.S. Patent No. 6,522,436 (*Roberts*).

Applicant traverses the rejection in the Office Action under 35 U.S.C. § 103(a) on the grounds that the references – either individually or in combination – fail to teach or suggest each and every element of the rejected claims. Claim 1 recites “a multiplexor coupled at a plurality of multiplexor inputs to each of said analyzable **electrical** signals, said multiplexor to select a multiplexor output from one of said analyzable **electrical** signals...” (emphasis added). The Examiner asserts that the selector switch AS disclosed in *Stoll* meets this limitation. See Figure 1.

However, a careful examination of *Stoll* reveals that *Stoll* does not teach what is claimed. Specifically, the selector switch AS disclosed by *Stoll* is an “**optical** multiplexor” (see Column 3, line 9). The AS (optical multiplexor) disclosed by *Stoll* receives **optical** signals and outputs an **optical** signal to an **optical** spectrum analyzer SA (see Column 3, lines 7-9 and Figure 1).

For example, *Stoll* requires an optical input to the optical spectrum analyzer (SA in Figure 1). Because the optical spectrum analyzer requires an optical input, *Stoll* teaches an optical multiplexor (AS). The teaching of *Stoll* to use an optical spectrum analyzer necessitates receiving an optical signal. In contrast, Claim 1, as described above, requires the multiplexor to select a multiplexor output from one of said analyzable *electrical* signals.

As a result, an analyzable electrical signal as required by Claim 1 will not work in *Stoll*. An *optical* spectrum analyzer cannot receive an analyzable *electrical* signal. For at least these reasons, *Stoll* does not teach a multiplexor coupled at a plurality of multiplexor inputs to each of said analyzable electrical signals, said multiplexor to select a multiplexor output from one of said analyzable electrical signals.

Further, *Roberts* does not teach a multiplexor coupled at a plurality of multiplexor inputs to each of said analyzable electrical signals, said multiplexor to select a multiplexor output from one of said analyzable electrical signals. The analyzer 7 of *Roberts* divides the received pulse for presentation to a detector array 8. See col. 5, lines 34-36. However, *Roberts* does not select a multiplexor output from one of said analyzable electrical signals. Instead, *Roberts* outputs the channel signals as a parallel word and not as a selected multiplexor output. See Figure 1 reference numeral 13, and col. 6, lines 15-19.

As a result, the combination of *Stoll* and *Roberts*. does not disclose “a multiplexor coupled at a plurality of multiplexor inputs to each of said analyzable electrical signals, said multiplexor to select a multiplexor output from one of said analyzable electrical signals...” and as such applicant respectfully requests that the Examiner withdraw the rejection based on *Stoll* in combination with *Roberts*. Claims 9, 15, and 21 each overcome the rejection under § 103 for at least the same reasons. Applicant respectfully requests that the rejection be withdrawn with respect to claims 1, 9, 15, and 21.

In addition to the above reasons, Claim 1 further recites “a transmitter for converting said retimed data signal such that said retimed data signal approximates said input optical signal and complies with input signal requirements of a network analyzer to which the retimed data signal is to be transmitted.” The Office Action readily admits that *Stoll* does not disclose this element.

The Examiner points to the clock recovery circuit 16 in *Roberts* as supplying this limitation. A careful review of *Roberts*. reveals that in fact the clock recovery circuit 16 does not

include each and every limitation of “a transmitter for converting said retimed data signal such that said retimed data signal *approximates said input optical signal* and complies with input signal requirements of a network analyzer to which the retimed data signal is to be transmitted.” *Roberts* teaches that an analyzer 7 divides an optical pulse for presentation to a detector array 8 (See Column 5, lines 35-37). The detector array 8 converts the divided signals into *electrical* outputs 9 which are input into a processor 10 (see Column 5, lines 37-39). *Roberts* does not describe any apparatus or method that converts a “retimed data signal” into a “data signal that approximates [an] input optical signal.”

In fact, the clock recovery 16 in *Roberts* may include retiming for the outputs 8 of the array 9. However, after the processor 13 receives the resulting inputs, the processor 13 outputs the channel signals as a parallel word. See col. 6, lines 15-19. A parallel word output by the processor 13 *does not* approximate the input optical signal received at the analyzer 7. As a result, *Roberts* fails to teach or suggest the requirement in Claim 1 of “a transmitter for converting said retimed data signal such that said retimed data signal approximates said input optical signal and complies with input signal requirements of a network analyzer to which the retimed data signal is to be transmitted.”

In light of the fact that the Office Action admits that *Stoll* does not disclose “a transmitter for converting said retimed data signal such that said retimed data signal approximates said input optical signal and complies with input signal requirements of a network analyzer to which the retimed data signal is to be transmitted” and that *Roberts* does not compensate for this deficiency as illustrated above, Applicant requests that the Examiner withdraw the rejection under 35 U.S.C. § 103(a) to claim 1. Similarly, because claims 9, 15, and 21 each recite similar limitations, applicant respectfully requests that the rejection to these claims be withdrawn as well.

For at least the reasons indicated above, Applicant believes that the independent claims 1, 9, 15 and 21 are in condition for allowance. Further, at least for their dependence on claims that are believed to be allowable, claims 2-4, 6-8, 10-12, 14, 16-18, 20, 22 and 26 are believed to be allowable as well. As such, applicant respectfully requests allowance of these claims.

Allowed Subject Matter

The Examiner has indicated that claims 5, 13, 19, 23 and 24 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicants wish to thank the Examiner for the careful review and allowance of those claims. As independent claims 1, 9, 15, and 21 are believed to be allowable, Applicant also believes that objection to claims 5, 13, 19, 23, and 24 be withdrawn and the claims allowed.

Conclusion

In view of the foregoing, Applicants believe the claims as presented herein are in allowable form. In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, or which may be overcome by an Examiner's Amendment, the Examiner is requested to contact the undersigned attorney.

Dated this 25th day of January 2005.

Respectfully submitted,



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